

REMARKS

The instant application is under final rejection. However, Applicant and the undersigned attorney submit that this final rejection is not proper because the Examiner has made significant misinterpretations of the teachings of the cited references as will be shown by the ensuing remarks.

The Examiner has rejected claims 10-11, 17-18, 23-24 and 30 under 35 U.S.C. 112, second paragraph, for the specific reasons stated in the Office Action. Although the Applicant submits that the Examiner was incorrect in his conclusion, Applicant has cancelled claims 11, 18-20 and 22-30 thereby rendering moot any rejections directed to these claims.

For purposes of clarity and to further patentably distinguish the claimed invention, Applicant has amended claim 1 to amend "central body portion" to just "central body". Applicant has amended claim 1 to delete the term "generally" which precedes the phrase "j shaped". Amended claim 10 also recites that the claimed seal is an "axial" seal, as clearly shown in the drawings of the present application.

Applicant has amended claim 17 to include the elements and/or limitations of claims 19 and 22 and to recite that the annular axial seal has a j-shaped cross-section.

Applicant has amended page 2 of the instant specification to add reference to FIGS. 1A and 1B.

The Examiner has rejected claim 10 under 35 USC 102(b) as

being anticipated by Bedford, U.S. Patent No. 6,086,069. The Examiner has based his rejection on the structure shown in Figure 3 of Bedford. The Applicant submits that Bedford clearly does not anticipate amended claim 10. The component shown in Figure 3 of Bedford is not a seal and certainly is not an annular axial seal. In fact, the component shown in Figure 3 of Bedford is referred to as "load ring 70". The disclosure of Bedford describes load ring 70 as being "cup-shaped and columnar in cross-section" (see column 2, lines 45-46). Load ring 70 clearly does not have a j-shaped cross-section. Load ring 70 and load ring 72 are adapted to apply a force to the seal faces of ring face seals 66, 68 (column 3, lines 30-35). Ring seals 66, 68 are face seals, not axial seals. Furthermore, claim 10 recites that "said second end portion curling in a first direction in accordance with a predetermined radius such that said second distal end is located across from said first side of said annular axial seal" (emphasis added). Such a structure is also explained in Exhibit B of the Declaration of Horace P. Halling filed November 3, 2004. The load ring 70 of Bedford clearly has no such structure. According to the Federal Circuit, "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." W.L. Gore & Assocs. V. Garlock, Inc. 220 USPQ 303, 313 (Fed. Cir. 1983). Furthermore, it is not enough that the reference

disclose all of the claimed elements in isolation. Rather, as stated by the Federal Circuit, the prior art reference must disclose each element of the claimed invention arranged as in the claim. Lindermann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1984). The exclusion of a claimed element from a prior art reference is enough to negate anticipation. Connell v. Sears, Roebuck & Co., 220 U.S. P.Q. 193,198 (Fed. Cir. 1983). The Examiner's rejection is not in accordance with the case law set forth above regarding the proper standards for an anticipation rejection. Applicant submits that the "load ring 70" of Bedford does not anticipate the annular axial seal of amended claim 10 because:

- 1) load ring 70 is not a seal at all and therefore, cannot be an annular axial seal;
- 2) load ring 70 does not have a j-shaped cross-section;
and
- 3) load ring 70 does not have the second end portion that curls in a first direction such that the second distal end is across from the first side of the annular axial seal as recited in claim 10.

The Examiner has rejected claims 10-15, 17-21 and 23-28 under 35 USC 102(b) as being anticipated by Halling et al. U.S. Patent No. 6,257,594 ("Halling"). Applicant has cancelled claims 11, 16, 18-20 and 22-30 thereby rendering

moot the rejection directed to these claims. With regard to claims 10, 12, 14, 15, 17 and 21, Applicant submits that Halling does not anticipate these claims. The invention in the Halling patent is the face seal shown in FIG. 3 of that patent. In column 4, lines 50-57 of the Halling patent, it is stated that the "seal 30 features a compound curved portion 31, legs 32, bends 33 and 34, and tips 35. The seal is shown partially compressed between the annular members 42 and 44, with sealing occurring at contact points 43 and 45". The Examiner has erroneously concluded that the object shown in FIG. 4A of Halling is the annular seal claimed in claims 10 and 17 of the instant application. However, the Halling patent clearly states the following with respect to FIG. 4A:

To illustrate the enhanced operation provided by the present invention, the seal 30 and enclosing annular components of FIG. 3 are described below using two different computer modeling simulations. FIGS. 4A through 4C are based on a half-section computer model of a seal 50 (similar to seal 30 of FIG. 3) and enclosed by annular components 57 and 58 (similar to components 42 and 44 shown in FIG. 3). FIGS. 5A through 5E are based on another computer model. (see column 4, lines 58-65).

In FIGS. 4A, 4B and 4C, only a half of the sealing ring is depicted. The other half is not depicted in the F.E.M. because it is symmetrical about line S with the half shown. (see column 5, lines 4-7).

Thus, FIG. 4A shows only half of the seal of FIG. 3. The Examiner's rejection, based on the Halling patent, is not in

accordance with the case law set forth above regarding the proper standards for an anticipation rejection. Halling clearly does not disclose the annular axial seal of amended claims 10 and 17. Therefore, Halling does not anticipate the annular axial seal of claims 10, 12, 14, 15, 17 and 21.

The Examiner has rejected claims 16, 22 and 29-30 under 35 USC 103(a) as being unpatentable over Halling (U.S. Patent No. 6,257,594) in view of Spence et al. (US2003/0107188). Applicant submits that the combination of Spence and Halling does not teach or suggest the subject matter of the claims in question. Although the Applicant disagrees with the Examiner's conclusion with respect to this rejection, the Applicant has cancelled claims 16, 22 and 29-30 thereby rendering moot the rejection directed to these claims.

Since it has been shown that independent claims 10 and 17 are patentable over the cited references, Applicant submits that dependent claims 12, 14, 15 and 21 are also patentable over the cited references.

Applicant submits that the present application is now in condition for allowance. Reconsideration and allowance of this application are therefore earnestly solicited.

Applicant is also enclosing herewith a Petition for Extension of Time for one month and the appropriate fee.

Respectfully submitted,

Date: March 26, 2005



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